

Fact Sheet



For Draft/Proposed Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-MSWLGP-2010**
Municipal Solid Waste Landfills General Permit

Facility Description

The facility is a landfill that is designed and operated to accept non-hazardous municipal solid waste and is included in Standard Industrial Code (SIC) 4953. These landfills accept municipal solid waste, asbestos and approved residual waste.

The General Permit language will be same for all facilities that want to use this permit. The Registration forms will be different for each facility. The Registration form shall list all emission sources and sections of the general permit which are applicable to the particular facility.

Advantages of General Permit over individual Permits:

1. Permits are streamlined – The General Permit provides more uniformity between permits for different facilities which translates into consistent compliance measures that should help companies with numerous sources.
2. The registration under General Permit will not involve advertisement. This will save permitting process time.

To apply for Registration permittee shall do the following:

- Request for Registration under General Permit R30-MSWLGP-2010.
- Submit New Title V application forms; in the equipment table, mention which sections of General Permit is applicable to the facility and each individual equipment;

Title V Program Applicability Basis

These facilities have design capacities equal to greater than 2.5 million megagrams and 2.5 million cubic meters. Due to these facilities design capacity, these facilities are required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Some of the facilities may also have the potential to emit over 100 tons per year of Volatile Organic Compounds (VOC) which will require them to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility may be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchanger
	45CSR4	Odor Control
	45CSR6	Open burning prohibited.
	45CSR7	To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary sources
	45CSR16	New Source Performance Standards
	45CSR17	To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and other sources of Fugitive Particulate Matter
	45CSR23	To Prevent and Control Emissions from Municipal Solid Waste Landfills
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 60 Subpart OOO	Standard of Performance for Nonmetallic Mineral Processing Plants
	40 C.F.R. Part 60 Subpart WWW	Standard of Performance for Municipal Solid Waste Landfills
	40 C.F.R. Part 60 Subpart Kb	VOC Storage Vessels
	40 C.F.R. Part 61 Subpart M	Asbestos NESHAP
	40 C.F.R. Part 60 Subpart JJJJ	Stationary Spark Ignition ICE
	40 C.F.R. Part 60 Subpart KKKK	Stationary Combustion Turbine
	40 C.F.R. Part 60 Subpart IIII	Stationary Compression Ignition ICE
	40 C.F.R. Part 60.18	General Control Device (flare) requirements
	40 C.F.R. Part 63 Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
	40 C.F.R. Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders: Please see the registration

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

1. 45CSR4 - To Prevent and Control the Discharge of Air Pollution into the Open Air which Causes or Contributes to an Objectionable Odor or Odors

Some facilities might use flare for controlling odor. Flare has to comply with 45CSR6.

2. 45CSR6 - *To Prevent And Control Air Pollution From Combustion of Refuse.*

This rule defines the flares as incinerators and sets the following limits:

The particulate matter emission limit from each flare is determined by the following formula:

PM Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where: F = 5.43 (*from 45CSR§6-4.1*)

Compliance with 45CSR6 weight limit (45CSR§6-4.1) shall be demonstrated by using site specific emission factors or using AP-42 factors.

Compliance demonstration with 45CSR6 weight limit (45CSR§6-4.1) is not required for flares subject to 40 C.F.R. § 60.18 or if the flare has no visible emissions allowed - Given the fact that no visible emissions are allowed from these flares and that the particulate matter emissions would be considered insignificant.

The visible emission limit from each flare is 20% opacity with the exception to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

This rule also prohibits from the flares, the emission of particles of unburned or partially burned refuse or ash which are large enough to be individually distinguished in the open air. The rule requires the flares, including all associated equipment and grounds, be designed, operated and maintained so as to prevent the emission of objectionable odors, and also requires an NSR permit for the construction, modification or relocation of any incinerator.

Compliance will be demonstrated through monthly visible emission checks and record keeping.

3. 45CSR7 - To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations

45CSR§7-3.1, 45CSR§7-3.2 and 45CSR§7-5.1

Facilities subject to 45CSR7 are subject to an opacity standard. Compliance will be demonstrated by conducting monthly visible emission observations, followed by 45CSR7A tests unless corrected within 24 hours. Records are to be kept.

WVDAQ believes that the above periodic monitoring approach for this facility is appropriate. DAQ bases this on the rule's requirements to install, inspect and maintain fugitive dust control systems for equipment identified in the permit for the emission sources listed in the Emission Unit Table 1.0 subject to 45CSR7.

45CSR§7-4.1

Crushing and screening operations are defined as Type "a" source operations in 45CSR§7-2.39.a. Table 45-7A shall be used to determine the maximum allowable stack emission rate.

Compliance with 45CSR§7-4.1 shall be demonstrated by using site specific emission factors or using AP-42 factors. For emission units with more stringent 45CSR13 or NSPS limits this compliance demonstration is not required.

4. 45CSR17 - *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.*

This rule sets a standard for fugitive particulate matter, which is not to be discharged beyond the facility boundary lines which causes statutory air pollution.

Compliance with this standard will be met by the facility submitting a control plan if the Director finds the facility in violation of this rule.

Note: Sources subject to fugitive particulate matter emission requirements of 45CSR7 shall be exempt from this rule.

5. 40 C.F.R. Part 60 Subpart WWW - *Standards of Performance for Municipal Solid Waste Landfills*, and 45CSR23 - *To Prevent and Control Emissions from Municipal Solid Waste Landfills*

These rules set standards triggered by design capacity and nonmethane organic compounds (NMOC) emission rate. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall follow the guidelines for collection and control system that captures the gas generated within the landfill according to 40 C.F.R § 60.752(b)(2); If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall Submit an annual emission report to the Administrator and recalculate the NMOC emission rate annually according to 40 C.F.R § 60.752(a). Also, the facility shall comply with MRR (Monitoring, recordkeeping and reporting provisions of 40 C.F.R. 60 Subpart WWW.

6. 40 C.F.R. Part 63 Subpart AAAA

A facility is subject to this subpart if the facility meets the criteria in paragraph (a) or (b) of this section.

(a) If the facility own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

- (1) The MSW landfill is a major source of HAPs.
- (2) The MSW landfill is collocated with a major source of HAPs.
- (3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

(b) If the facility own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in 40 C.F.R §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:

- (1) The MSW landfill is a major source of HAPs.
- (2) The MSW landfill is collocated with a major source of HAPs.
- (3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.

40 C.F.R. Part 63 Subpart AAAA requires facilities to devise and implement a startup, shutdown, and malfunction plan (SSM) for the gas collection and control system (GCCS) and to submit semi-annual reports of the operation of the GCCS and control device. A deviation occurs when a SSM plan is not developed or maintained on site and when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data.

7. 40 C.F.R. Part 60 Subpart OOO

The provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, screening operations, etc. An affected facility is subject to the requirements of this rule if the affected facilities commenced construction, modification, or reconstruction after August 31, 1983.

40 C.F.R. § 60.670 spells out detailed applicability and designation of affected facility for this rule.

8. 40 C.F.R. Part 60 Subpart Kb

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

40 C.F.R. § 60.110b spells out detailed applicability and designation of affected facility for this rule.

8. 40 C.F.R. Part 60 Subpart JJJJ

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of 40 C.F.R. § 60.4230.

9. 40 C.F.R. Part 60 Subpart IIII

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of 40 C.F.R. § 60.4200.

10. 40 C.F.R. Part 60 Subpart KKKK

If the facility has a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, the turbine is subject to this subpart.

40 C.F.R. § 60.4305 spells out detailed applicability for this rule.

11. 40 C.F.R. Part 61 Subpart M - Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 40 C.F.R. §§ 61.149, 61.150, or 61.155 shall meet the requirements of 40 C.F.R. § 61.154 as described in the general permit.

12. 45CSR2 – According to 45CSR§2-11.1, fuel burning units having a heat input under 10 million BTU's per hour are exempt from 45CSR§§2-4, 5, 6, 8 & 9.
13. 40 C.F.R. Part 63 Subpart ZZZZ

The facility is subject to this subpart if the facility own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

40 C.F.R § 63.6585 spells out detailed applicability for this rule.

To minimize fugitive dust emissions from the facility, conditions 3.4.4 and 3.4.5 have been added to the permit to maintain records of dust control measures applied and monitoring of fugitive dust control systems.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 C.F.R. §60.757 (a)(3) (March 12, 1996)	The design capacity of these facilities are greater than 2.5 million megagrams and 2.5 million cubic meters. Therefore, amended design capacity reports are not required.
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Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: October 15, 2010
Ending Date: November 14, 2010

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Waste Management made the following comments:

1. A June 20, 2008 transmittal of the South Hills Landfill Title V Operating Permit (effective 6/16/2008). Similar to our Title V Operating Permits throughout this particular Region, this permit contains several “alternatives” that have proven very beneficial to PADEP and the associated facilities. These alternatives help to simplify the confusing reporting (and subsequent response) process that some Departments believe is contemplated by sections of NSPS Subpart WWW. As you mentioned, the appearance of these alternatives within our existing Title V Operating Permits, that have been reviewed by USEPA Region 3, will facilitate incorporation into the General Permit.
2. The Final Rule (NSPS Subpart JJJJ) of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (73 FR 3568). Within the preamble to this rule, the USEPA clearly indicates (at 73 FR 3574) that “a stationary engine that is overhauled as part of a maintenance program is not considered a modification if there is no increase in emissions”. The background to the statement from USEPA is further clarified within the attached “Response to Public Comments” document (at Page 42). This determination from the USEPA assists renewable energy projects (utilizing spark ignition internal combustion engines burning landfill gas) in ensuring timely routine maintenance activities that likely improve engine performance.

Response to comments:

Response to comment No. 1 – Sections 4.1.4 and 4.4.1 have been added to the general permit to allow alternative compliance requirements in accordance with 40 C.F.R. §60.753(c) for specific categories of gas extraction wells (wells in uncapped areas, wells with low flows, well in an area of active waste placement that is inaccessible due to its casing height) on a case by case basis. The facility shall apply for alternative compliance during registration and the alternative compliance has to be approved by WVDEP.

Even if the alternative compliance is approved the landfill has to maintain an effective gas collection system and the landfill has to maintain the GCCS (Gas collection and control system) system which complies with 40 C.F.R. 60.753(d).

Response to comment No. 2 - The Final Rule (NSPS Subpart JJJJ) of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (73 FR 3568). Within the preamble to this rule, the USEPA clearly indicates (at 73 FR 3574) that “a stationary engine that is overhauled as part of a maintenance program is not considered a modification if there is no increase in emissions”. Sections 12.0.2 and 12.1 have been added to the General permit to address the engines that are overhauled as a part of maintenance program. Similarly, within the preamble to turbine NSPS rule, the USEPA clearly indicates (at 73 FR 38484) that “a turbine that is overhauled as part of a maintenance program is not considered a modification if there is no

increase in emissions”. Sections 13.0.2 and 13.1 have been added to the General permit to address the turbines that are overhauled as a part of maintenance program.

Note: Greenhouse Gas Clean Air Act requirements shall be addressed for a specific facility when the facility registers under this General Permit.